



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Heaths Creek

Water Body ID: 0848

Water Body Segment at a Glance:

County: Pettis
Nearby City: Hughesville
Length: 21 miles
Pollutant: Low dissolved oxygen
Source: Unknown



State Map Showing Location of Watershed

Scheduled for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. Heaths Creek is impaired due to exceedances of water quality criteria for the protection of aquatic life.

Designated uses of Heaths Creek*

- Warm Water Habitat (WWH)
- Cool Water Habitat (CLH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Designated use that is impaired

- Warm Water Habitat (WWH) / Cool Water Habitat (CLH)

Criteria that apply

The dissolved oxygen criterion applicable to Heaths Creek is found in Table A of Missouri's Water Quality Standards at 10 CSR 20.7.031. Table A states that the minimum allowable dissolved oxygen concentration for the protection of aquatic life in warm and cool water habitats is a minimum 5 milligrams per liter (mg/L).

Assessment and water quality data

Dissolved oxygen is important, as many aquatic organisms require high levels of oxygen to survive. The department judges a stream to be impaired due to low dissolved oxygen if more than 10 percent of measurements in a water body fail to meet the water quality criterion. In the case of Heaths Creek, 47.2 percent of the dissolved oxygen data did not meet the water quality criterion.

Dissolved Oxygen Data for Heaths Creek

Site #	From	To	No. Samples	No. <5 mg/L	Percent <5
1	7/12/2006	9/14/2006	5,746	3,389	59.0
2	7/12/2006	9/14/2006	6,120	3,677	60.1
3	8/7/2006	9/13/2006	5,674	2,460	43.4
1	7/18/2007	9/5/2007	4,674	1,194	25.5
2	7/18/2007	11/9/2007	9,948	6,094	61.2
3	7/19/2007	9/5/2007	4,608	553	12.0
			36,770	17,367	47.2*

*Frequency of exceedance greater than 10 percent is considered an impaired condition.

TMDL for Heaths Creek

The Heaths Creek TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Craven Ditch TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

For more information call or write:

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Map of the Heaths Creek Watershed

